Training and Technical Assistance Centers Virginia Department of Education



Autism E-News Volume 6, Issue 3 May 2008

Publication information: Copyright "Autism E-News" 2004, 2005, 2006, 2007. All Rights reserved. Copies may be distributed without alteration electronically free of charge. This newsletter may be reproduced without alteration, for non-commercial purposes without prior permission. "Autism E-News" does not assume responsibility for advice given. All advice should be weighed against your own abilities and circumstances and applied accordingly. It is up to the reader to determine if advice is safe and suitable for his/her own situation.

The Autism Priority Project is excited to bring you this informative article by Dr. Scott Bellini of the Indiana Resource Center for Autism (IRCA) at Indiana University, Bloomington.

Dr. Scott Bellini is the Assistant Director of the Indiana Resource Center for Autism (IRCA) at Indiana University, Bloomington . Dr. Bellini received his Ph.D. in School Psychology from Indiana University, Bloomington . In addition to his work at the IRCA, Dr. Bellini is a licensed psychologist working in a private practice in Southern Indiana where he develops and delivers social, emotional, and behavioral interventions for children and adolescents with ASD. He is currently serving on the editorial board for the journal, Focus on Autism, and is a member of the Autism Services Work Group, a committee commissioned by the U.S. Department of Health and Human Services. Dr. Bellini is currently conducting research on anxiety disorders and the benefits of video self-modeling for children and adolescents with autism spectrum disorders and has published manuscripts and spoken nationally on the topic of social-emotional functioning of children with ASD.

Making (and Keeping) Friends: A Model for Social Skills Instruction

Scott Bellini

"I am not asking for my child to be the life of the party, or a social butterfly. I just want her to be happy and have some friends of her own. She is a wonderful kid, and I hope someday others can see that."

Social Skill Deficits in Autism Spectrum Disorders

Indeed, many parents of children with autism spectrum disorders (ASD) echo this sentiment concerning their child's social functioning. They know that their child has many wonderful qualities to offer others, but the nature of their disability, or more precisely, their poor social skills, often preclude them from establishing meaningful social relationships. This frustration is amplified when parents know that their children want desperately to have friends, but fail miserably when trying to make friends. Often, their failure is a direct result of ineffectual programs and inadequate resources typically made available for social skills instruction. For most children, basic social skills (e.g., turn taking, initiating conversation) are acquired quickly and easily. For children with ASD, the process is much more difficult. Whereas, many children learn these basic skills simply by exposure to social situations, children with ASD often need to be taught skills explicitly, and as early as possible. The present article addresses social skill deficits in young children with ASD by providing a systematic five-step model for social skills instruction, with particular emphasis placed on an emerging intervention strategy, video self-modeling (VSM).

Lack of "Know-How" Versus Lack of Social Interest

Impairment in social functioning is a central feature of ASD. Typical social skill deficits include: initiating interactions, responding to the initiations of others, maintaining eye contact, sharing enjoyment, reading the non-verbal cues of others, and taking another person's perspective. The cause of these skill deficits varies, ranging from inherent neurological impairment to lack of opportunity to acquire skills (e.g., social withdrawal). Most important, these social skill deficits make it difficult for the individual to develop, and keep meaningful and fulfilling personal relationships. Although social skill deficits are a central feature of ASD, few young children receive adequate social skills programming (Hume, Bellini, & Pratt, 2005). This is a troubling reality, especially considering that the presence of social impairment may lead to the development of more detrimental outcomes, such as poor academic achievement, social failure and peer rejection, anxiety, depression, and other negative outcomes (Bellini, 2006; Tantam, 2000; Welsh, Park, Widaman, & O'Neil, 2001). And the lack of social skills programming is particularly troubling given that fact that many social skill difficulties can be ameliorated via effective social skills instruction.

The long held notion that children with autism spectrum disorders lack an interest in social interactions is often inaccurate. Many children with ASD do indeed desire social involvement, however, these children typically lack the necessary skills to interact effectively. One young man I worked with illustrates this point quite well. Prior to my visit, the school staff informed me of his inappropriate behaviors and his apparent "lack of interest" in interacting with other children. After spending the morning in a selfcontained classroom, Zach was given the opportunity to eat lunch with the general school population (a time and place that produced many of the problem behaviors). As he was eating lunch, a group of children to his right began a discussion about frogs. As soon as the conversation began, he immediately took notice. So too did I. As he was listening to the other children, he began to remove his shoes, followed by his socks. I remember thinking, "Oh boy, here we go!" As soon as the second sock fell to the ground, Zach flopped his feet on the table, looked up at the group of children and proclaimed, "Look, webbed feet!" The other children (including myself) stared in amazement. In this case, Zach was demonstrating a desire to enter and be a part of a social situation, but he was obviously lacking the necessary skills to do so in an appropriate and effective manner.

This lack of "know-how" could also lead to feelings of social anxiety in some children. Many parents and teachers report that social situations typically evoke a great deal of anxiety from their children. Children with ASD often describe an anxiety that resembles what many of us feel when we are forced to speak in public (increased heart rate, sweaty palms, noticeable shaking, difficulties concentrating, etc.). Not only is the speaking stressful, but just the thought of it is enough to produce stomach-gnawing butterflies. Imagine living a life where every social interaction you experience was as anxiety provoking as having to make a speech in front of a large group! The typical coping mechanism for most of us is to reduce the stress and anxiety by avoiding the stressful situation. For children with ASD, it often results in the avoidance of social situations, and subsequently, the development of social skill deficits. When a child continually avoids social encounters, she denies herself the opportunity to acquire social interaction skills. In some children, these social skill deficits lead to negative peer interactions, peer rejection, isolation, anxiety, depression, substance abuse, and even suicidal ideation. For others, it creates a pattern of absorption in solitary activities and hobbies; a pattern that is often difficult to change.

A Five Step Model

- 1. Assess Social Functioning
- 2. Distinguish Between Skill Acquisition and Performance Deficits
- 3. Select Intervention Strategies
- 4. Implement Intervention
- 5. Evaluate and Monitor Progress

The following section will summarize my five-step model of social skills instruction (Bellini, 2006). Before implementing social skills instruction, it is important to begin with a thorough assessment of the individual's current level of social skills functioning. Once the assessment is complete, the next step is to discern between skill acquisition deficits and performance deficits. Based on this information, the selection of intervention strategies takes place. Once intervention strategies are implemented, it is then imperative to evaluate and modify the intervention as needed. Although I use the term "Steps," it is important to note that the model is not perfectly linear. That is, in real-life applications social skills instruction will not follow a lock-step approach from step one to step five. For instance, it is not uncommon for me to identify additional social skill deficits (step one) while I am in the middle of the implementation process (step four). In addition, I am continually assessing and modifying the intervention as additional information and data are accumulated

Assess Social Functioning

The first step in any social skill training program should consist of conducting a thorough evaluation of the child's current level of social functioning. The purpose of the assessment is to answer one very basic, yet complicated, question: What is precluding the child from establishing and maintaining social relationships? For most children, the answer takes the form of specific social skill deficits. For others, the answer takes the form of cruel and rejecting peers. And for yet other children, the answer is both.

The evaluation should detail both the strengths and weakness of the individual related to social functioning. The assessment should involve a combination of observation (both naturalistic and structured), interview (e.g., parents, teachers, playground supervisors, the child), and standardized measures (e.g., behavioral checklists, social skills measures). I have developed the Autism Social Skills Profile (ASSP) to assist in the identification of typical social skill deficits in children with ASD, and to measure the progress the child is making in the program. Kathleen Quill (2000) also provides an excellent social skills checklist for parents and professionals in her book, Do-Watch-Listen-Say. It is important for the child's team to ascertain current level of functioning and effectively intervene at the child's area of need. For instance, if the evaluation reveals that the child is unable to maintain simple one-on-one interactions with others, then the intervention should begin at this level and not at a more advanced group interaction level. Or, if the evaluation revels that the child does not know how to play symbolically or even functionally with play items, then the intervention will probably begin by teaching play skills prior to teaching specific interaction skills. After a thorough assessment of social functioning is complete, the team should then determine whether the skill deficits identified are the result of skill acquisition deficits or performance deficits.

[Author's Note: A detailed description of social skills assessment is beyond the scope of this article. More information on this topic, including a copy of the ASSP, can be found in the author's book, *Building Social Relationships*]

Distinguish Between Skill Acquisition and Performance Deficits

After a thorough assessment of the child's social functioning and after identifying the skills that we will teach, it is imperative to determine whether the skill deficits are the result of skill acquisition deficits or performance deficits (Elliott & Gresham, 1991). Simply put, the success of your social skills program hinges on your ability to distinguish between skill acquisition deficits and performance deficits!

A skill acquisition deficit refers to the absence of a particular skill or behavior. For example, a young child with ASD may not know how to effectively join-in activities with peers; therefore, he/she will often fail to participate. If we want this child to join-in activities with peers, we need to teach her the necessary skills to do so.

A *performance deficit* refers to a skill or behavior that is present, but not demonstrated or performed. To use the same example, a child may have the skill (or ability) to join-in an activity, but for some reason, fails to do so. In this case, if we want the child to participate we would not need to teach the child to do so (since she already has the skill). Instead, we would need to address the factor that is impeding performance of the skill, such as lack of motivation, anxiety, or sensory sensitivities.

A good rule of thumb in discerning between a skill acquisition deficit and a performance deficit is to ask the question, "Can the child perform the task with multiple persons and across multiple settings?" For instance, if the child only initiates interactions with mom at home and not with his peers at school, then you should address the initiation difficulty as a skill acquisition deficit. I hear the statement a lot from school personnel, "The child interacts fine with me, so it must be a performance deficit, right?" Not quite. In my experience, children with ASD tend to interact better and more easily with adults, because adults typically make it easy for them; the adults do most of the conversational "work" for the child. To use a baseball analogy, just because Tommy can hit Dad's soft, underhand pitches at home, doesn't mean he has mastered the skill well enough to hit pitches thrown by his peers on the playing field. Sometimes adult interactions with children with ASD are similar to throwing a child a soft, underhand pitch. Although they are positive and well intended, they do not adequately prepare the child for more difficult peer-to-peer interactions.

Too often, social skill deficits and inappropriate behaviors are incorrectly conceptualized as performance deficits. That is, we tend to assume that when a child does not perform a behavior, it is the result of refusal or lack of motivation. In other words, we assume that the child who does not initiate interactions with peers has the ability to initiate, but does

not want to initiate (performance deficit). In many cases, this is a faulty assumption. In my experience, the vast majority of social skill deficits in young children with ASD can be attributed to skill acquisition deficits. That is, children with ASD are not performing socially because they lack the necessary skills to perform socially-not because they do not want to be social or refuse to be social. If we want young children to be successful socially, then we have to TEACH them the skills to be successful! Therefore, it is essential to focus on skill development when implementing social skills instruction.

The benefit of using a skill acquisition/performance deficit model is that it guides the selection of intervention strategies. Most intervention strategies are better suited for either skill acquisition or performance deficits. The intervention selected should match the type of deficit present. That is, you would not want to deliver an intervention designed for a performance deficit, if the child was mainly experiencing a skill acquisition deficit. For instance, in the example above, if Tommy has not mastered the skill of hitting (skill acquisition deficit), all the reinforcement in the world (including pizza!) will not help Tommy hit the ball during the game. If we want him to be a skilled hitter, we need to provide Tommy additional instruction on the mechanics of hitting a baseball. The same is true for social skills. If we want a child to be socially fluent, then we need to deliver effective social skills instruction. In contrast, if Tommy does have sufficient hitting skills, but lacks the motivation to "do his best," then the reward of cheese and pepperoni may be all he needs to excel on the playing field.

Once a thorough social skill assessment is completed and the team is able to attribute the social difficulties to either skill acquisition or performance deficits, social skills instruction is ready to begin. There are a variety of strategies that can be delivered to young children with ASD. The most important thing is that the strategies being delivered are appropriate to the unique needs of the child and that a logical rationale can be provided for using the intervention. The following strategies provide a sampling of techniques that can be implemented to teach successful social interaction skills to children and adolescents with ASD. Other than peer mediated interventions (PMI), the strategies listed below are designed to address skill acquisition deficits. However, some of the strategies (in particular, video self-modeling and social stories) work equally well in addressing performance deficits. In addition, it is imperative that the child be reinforced continually for his effort and participation in the program.

Selecting Intervention Strategies

Accommodation and Assimilation

When selecting intervention strategies, it is important to consider the notion of accommodation versus assimilation. Accommodation, as it relates to social skills instruction, refers to the act of modifying the physical or social environment of the child to promote positive social interactions. Examples of this include: training peer mentors to interact with the child throughout the school day, autism awareness training for classmates, and signing your child up for various group activities, such as little league, or Boy or Girl Scouts. Whereas accommodation addresses changes in the environment, assimilation focuses on changes in the child. Assimilation refers to instruction that facilitates skill development that allows the child to be more successful in social interactions. The key to a successful social skills training program is to address both accommodation and assimilation. Focusing on one and not the other sets the child up for failure. For instance, one family that I worked with did a wonderful job of structuring playgroups for their child, and keeping their child active in social activities. However, they were becoming increasingly frustrated with the fact that their son was not making friends and still having negative peer interactions. The problem was that they were putting the cart before the horse. They provided their child with ample opportunity to interact with others, but they weren't providing him the skills necessary to be successful in those interactions. Similarly, providing skill instruction (assimilation) without modifying the environment to be more accepting of the child with autism also sets the child up for failure. This happens the moment an eager child with autism tries out a newly learned skill on a group of non-accepting peers. The key is to teach skills and modify the environment. This ensures that the new skill is received by peers with both understanding and acceptance.

Social Skills Strategies

As stated previously, social skills often need to be taught explicitly to children and adolescents with ASD. Traditional social skills strategies (such as board games about friendships and appropriate classroom behavior) tend to be too subtle for many children with ASD. For instance, a school counselor was frustrated with the progress she was making with a student with autism. She stated that the program was showing positive results with "other kids in the group," but the student with autism didn't seem to "get it." Indeed, he was not "getting it!" The reason was quite apparent. The school counselor was attempting to teach the students about the concept of "friendship." This is acceptable for some children, but for children with ASD it tends to be a too subtle form of instruction. That is, instead of spending countless hours teaching the child about "friendship," the instruction should have focused on skills the child could use to make and keep friends. Experience tells me that the concept of friendship is much easier to understand once you have a friend or two!

There are number of important questions to consider when selecting social skill strategies. For instance, does the strategy target the skill deficits identified in the social assessment? Does the strategy enhance performance? Does the strategy promote skill acquisition? Is there research to support its use? If not, what is your plan to evaluate its effectiveness with your child? Is it developmentally appropriate for your child? The following is a list of social skill strategies that have demonstrated effectiveness in teaching social interaction skills to children with ASD.

The following section summarizes various social intervention strategies that have been designed to promote social interaction skills in young children with ASD, including peermediated instruction, thinking-feeling activities, social stories, role-playing, and video-modeling.

Peer Mediated Interventions

The use of peer mentors is one example of an effective strategy for young children with ASD. Peer mediated interventions (PMI) have been frequently used to promote positive social interactions among preschool aged peers (Strain & Odom, 1986; Odom, McConnell, & McEvoy 1992). Peer mediated instruction allows us to structure the physical and social environment in a manner to promote successful social interactions. In this approach, peers are systematically trained to make social initiations or respond promptly and appropriately to the initiations of children with ASD during the course of their school day. Peer mentors should be classmates of the child with ASD, have ageappropriate social and play skills, have a record of regular attendance, and have a positive (or at least neutral) history of interactions with the child with ASD. Peer mentors should also be made aware of the behaviors associated with autism in a manner that is respectful and developmentally appropriate for the age group. The use of peer mentors allows the teacher and other adults to act as facilitators, rather than participate as active playmates. That is, instead of being a third wheel in child-child interaction, the teacher prompts the peer buddies to initiate and respond appropriately to the child with ASD and then get out of the way!. The use of peer mentors also facilitates generalization of skills by ensuring that newly acquired skills are performed and practiced with peers in the natural environment.

For more information on peer-mediated interventions, see *Vanderbilt/Minnesota social interaction project play time/social time: Organizing your classroom to build interaction skills.* (Odom & MCConnell, 1993).

Thoughts and Feelings Activities

Recognizing and understanding the feelings and thoughts of self and others is often an area of weakness for children with ASD and is essential to successful social interactions. For instance, we continually modify our behavior based on the non-verbal feedback we receive from other people. We may elaborate on a story if the other person is smiling, looking on intently, or showing other signs of genuine interest. On the other hand, if the

other person repeatedly looks at her watch, sighs, or looks otherwise disinterested, we may perhaps cut the story short (I said perhaps!). Children with ASD often have difficulty recognizing and understanding these non-verbal cues. Because of this, they are less able to modify their behavior to meet the emotional and cognitive needs of other people.

The most basic thought and feeling activity involves showing the child pictures of people exhibiting various emotions. Pictures can range from showing basic emotions such as happy, sad, angry, or scared, to more complicated emotions such as embarrassed, ashamed, nervous, or incredulous. Begin by asking the child to point to an emotion (i.e., "point to happy"), then ask the child to identify what the character is feeling (i.e., "how is he feeling.

Many of the young children I work with seem to pick up the ability to identify emotions quite easily. When they do, it is time to move on to more advanced instructional strategies, such as teaching them to understand the meaning or "why" behind emotions. This requires the child to make inferences based on the context and cues provided in the picture. That is, based on the information in the picture, ask "why is the child sad?" The pictures should portray characters participating in various social situations and exhibiting various facial expressions or other nonverbal expressions of emotion. You may cut pictures out of magazines, or download and print them from the Internet. You may also use illustrations from children's books, which are typically rich in emotional content and contextual cues.

Once mastery is achieved on the pictures, move to television programs or video footage of social situations. Many of the programs that air on Sprout or Noggin, are excellent resources for this procedure because they portray characters in social situations, and display clear emotional expressions. You can use the same procedure as for the pictures, only this time the child is making inferences based on dynamic social cues. Simply ask the child to identify what the characters in the video are feeling and why they are feeling that way. When the scenario moves too quickly for the child, press pause, and ask the question with a still frame. (Make sure your machine has a clear picture when on pause.)

Patricia Howlin's book *Teaching Children with Autism to Mind-Read* offers helpful information and resources in this area of instruction. In addition, there are a number of software programs on the market that address both emotions and perspective taking abilities (see *Mind-Reading: An Interactive Guide to Emotions by* Simon Baron-Cohen).

Social Stories

A Social Story is a frequently used strategy to teach social skills to children with disabilities. A Social Story is a non-coercive approach that presents social concepts and rules to children in the form of a brief story. This strategy could be used to teach a number of social and behavioral concepts, such as making transitions, playing a game, and going on a field trip. Carol Gray (1995; 2000) outlines a number of components that are essential to a successful Social Story, including: the story should be written in response to the child's personal need; the story should be something the child wants to read on her own (depending upon ability level); the story should be commensurate with ability and comprehension level; and the story should use less directive terms such "can," or "could," instead of "will" or "must." This last component is especially important for children who tend to be oppositional or defiant (i.e., the child who doesn't decide what to do until you tell him to do something...then he does the opposite!). The Social Story can be paired with pictures and placed on a computer to take advantage of the child's propensity towards visual instruction and interest in computers. I have found that children with ASD learn best when Social Stories are used in conjunction with Role-Playing and used as a social primer. That is, after reading a Social Story, the child then practices the skill introduced in the story. For instance, immediately after reading a story about joining-in an activity with peers, the child would practice the skill. Then, after reading the story and practicing the skill, the child would be exposed to a social situation where she would have an opportunity to perform the skill. For more comprehensive guidance on creating a Social Story, see Gray, 1995.

Role Playing/Behavioral Rehearsal

Role-playing or behavioral rehearsal is used primarily to teach basic social interaction skills. It is an effective approach to teaching social skills that allows for the positive practice of skills (Gresham , 2002). Role-playing involves acting out situations or activities in a structured environment to practice newly acquired skills and strategies, or previously learned skills that the child is having difficulties performing. Role-plays can be either scripted or spontaneous. In the latter, the child is provided with a scenario (e.g., asking another child to play with him), but not with the specific script. Typically, I combine scripted and unscripted elements to each role-play. For instance, the child might be provided with an opening statement or question, but the rest of the interaction would be spontaneous.

I use role-playing to teach a variety of interaction skills, particularly those involving initiating, responding, and terminating interactions. In one scenario, the child is required to initiate a conversation with another person, who is engaged in a separate task. Consequently, he would have to ask to join in, or ask the other person to join him in an

activity. The latter typically proves to be most difficult for children with ASD. During the first few sessions, it is not uncommon for the child to get "stuck" in conversations and interactions, often for minutes without knowing what to say or how to proceed. During the early sessions, the child should be given ample time to process and respond to the role-play scenarios. As the sessions progress, speed and proficiency should gradually increase.

Video Modeling and Video Self-Modeling (VSM)

Video modeling is without a doubt the most effective social skills intervention strategy that I have used with young children with ASD. A video modeling intervention involves an individual watching a video demonstration of a behavior and then imitating the behavior of the model. Video modeling may be used with peers, adults, or self as a model (video self-modeling). Video self-modeling (VSM) interventions have the added advantage of providing the child with a visual representation of success...their own success! VSM can be used to promote skill acquisition, enhance skill performance, and reduce problem behaviors. It integrates a powerful learning medium for children with ASD (visually cued instruction) with an effective evidence-based intervention modality (modeling).

An emerging body of research demonstrates great promise for the use of video modeling (peer or adult as model), and video self-modeling (VSM), as a therapeutic modality for children with ASD. Bellini and Akullian (in-press) conducted a meta-analysis of video modeling and video-self modeling research across 20 peer-reviewed studies and involving 63 participants with ASD. Results suggest that video modeling and VSM are effective intervention strategies for addressing social-communication skills, behavioral functioning, and functional skills in children and adolescents with ASD. Specifically, these procedures promote skill acquisition and that skills acquired via video modeling and VSM are maintained over time and transferred across person and settings. That is, video modeling and VSM appear to be effective interventions for children across the spectrum of autism from early childhood to adolescence. Interventions produced rapid increases (or decreases in some cases) in targeted skills with a median intervention length of nine video viewings. In addition, the median duration of the video clips shown to participants was only three minutes.

VSM interventions typically fall within two categories, positive self-review (PSR) and video feedforward (Dowrick, 1999).

PSR refers to children viewing themselves successfully engaging in a behavior or activity that is currently in their behavioral repertoire. PSR may be used with low-frequency behaviors or behaviors that were once mastered, but are no longer. In this case, the individual is videotaped while engaging in the low-frequency behavior and then shown a video of the behavior. An example of a PSR intervention for preschoolers would be to video record the child participating with peers (low frequency behavior) and then show the child the video. Buggey and colleagues (1999) used a PSR intervention to increase responding behaviors in young children with ASD. The children in the study viewed videotapes of themselves answering questions while engaging in play activities. Although answering questions was a low frequency behavior for these children, the videos were edited to portray the children as fluent in their responses (i.e., non-responses were edited out of the video). The intervention produced rapid increases in unprompted verbal responding.

Video feedforward, another category of VSM interventions, is typically used when the individual already possesses the necessary skills in her behavioral repertoire, but is unable to put them together to complete an activity. For instance, the child may have the ability to get out of bed, brush her teeth, get dressed, and comb her hair (morning routine), but cannot perform these skills in the proper sequence. A video feedforward intervention would videotape her engaging in each of these tasks and then splice the segments together to form the proper sequence. The same may be done with typical social interaction sequences. For instance, the child could be videotaped demonstrating three different skills: initiating an interaction, maintaining a reciprocal interaction, and appropriately terminating the interaction. The three scenes could then be blended together to portray one successful, and fluent social interaction.

Feedforward is also a good option for children who need additional assistance, or support, to complete tasks successfully. The notion of "hidden supports" is an important component of video feedforward interventions. For instance, the child may be videotaped interacting with peers while an adult provides assistance through cueing and prompting. The adult prompt is edited out (i.e., hidden) so that when the child views the video segment, she sees herself as independent and successful. Feedforward requires additional technological capabilities, as compared to PSR, but it typically requires a smaller quantity of raw video footage.

For additional instruction on conducting VSM intervention, please refer to the Video Futures Project at the University of Alaska, Anchorage, http://www.alaskachd.org/video/.

For additional information on editing home movies, check out the helpful website, How Stuff Works, at: http://computer.howstuffworks.com/video-editing.htm

Implement the Intervention

Once you have assessed social skill functioning and identified skills to teach, discerned between skill acquisition and performance deficits, and selected intervention strategies, it is time to implement the strategies. Social skills instruction should be provided in multiple settings (home, classroom, resource room, playground, community, etc.) and by multiple providers. There is no "best" place to teach social skills, though it is important to keep in mind that the purpose of all social skills instruction should be to promote social success with PEERS, in the NATURAL environment. As such, if the child is receiving social skills training in a school resource room (or by a private therapist), it is imperative that a plan be put in place to facilitate transfer of skills from the resource room to the natural environment. Parents and teachers should look for opportunities to prompt and reinforce the skills that are being taught in the resource room or clinic.

Rate of skill development differs greatly from one child to the next. Some children will begin utilizing their new skills after only two or three sessions, while other children may require over three months to before they begin to "get it" and start using their newly learned skills. Of course simply using or trying a skill is just the first step towards social success. The child will take additional time to master the social skills that he is learning and developing. Gresham et al. (2001) recommended that social skills training be implemented more frequently and more intensely than what is typically implemented. They concluded that "thirty hours of instruction, spread over 10-12 weeks is **NOT** enough" (p. 341). Social skill instruction should be intense (as frequently as possible) and encompassing (in every environment the child enters).

Assess and Modify the Intervention

Although "Assess and Modify" is listed as the last stage in the intervention process, it certainly is not the least important. In addition, it also is not the last thing to think about when designing a social skills program. Typically, as soon as I am able to identify the social skill deficits to be addressed, I begin to develop the methods for evaluating the efficacy of the intervention. To use a basic example, if the target of the intervention is social initiations, then I might take baseline data on the frequency of initiations with peers and adults. I would then continue to collect data on social initiations throughout the implementation stage. Accurate data collection is essential in evaluating the effectiveness of the intervention. It allows us to determine whether the child is benefiting from the instruction, and how to modify the program to best meet the child's needs. In school settings, accurate data collection is a legal imperative. When I work with school teams, the focus is on integrating the social skills program with the child's behavioral and social objectives. As such, Stage 5 is typically a very important aspect of IEP development, implementation, and integrity.

Case Example

The following case study illustrates the use of a social skills intervention for a young girl diagnosed with autism. "Kelly," was a kindergartener with low average verbal ability.

Although her vocabulary was in the average range for children her age, she seldom used her language spontaneously with classmates and teachers. She spoke only when asked direct questions and interacted only when others initiated the interactions. Consequently, Kelly spent the majority of her playground time by herself, with little peer interaction. A social skills assessment concluded that she had significant skill deficits in initiating interactions, and maintaining interactions with peers. A social skills intervention was designed to increase the frequency and length of social interactions with peers. Data on peer interactions (initiations and responses to peers) were collected in both a structured playgroup, and during recess. Two peer mentors were selected to participate in a structured playgroup with Kelly. The peers were instructed to initiate and to respond promptly to Kelly's initiations. The peers were also provided developmentally appropriate information regarding autism and Kelly's behaviors, which included hand-flapping. Also prior to the playgroup. Kelly was read a social story related to initiating social interactions. Each time the story was read, Kelly was given the opportunity to practice initiation skills via a role-playing procedure. The children participated in a playgroup three days a week for two weeks. During the playgroups, Kelly was prompted to initiate interactions with the peers, and she was prompted to respond promptly and appropriately to the peers when they initiated interactions with her. The playgroups were videotaped over the two-week time period. The video footage was then edited to exclude the continual prompting and coaching provided to Kelly. The edited tapes portrayed Kelly fluently and effectively interacting with her peers. The tapes were shown to Kelly in 5minute increments for two weeks. For Kelly, the VSM procedure facilitated immediate increases in initiations and responses to peers in both the play setting and on the playground. By the end of the school year, Kelly had developed relationships with two other children, friendships that continue to this day.

The purpose of this article is not to provide an all-inclusive list of social skills strategies available for children with ASD. Instead, the present article presents a social skills training model that assists families and professionals in the delivery of social skills instruction. In addition, not all programs are appropriate for every child. Great care and planning needs to be put forth to ensure that the strategies used in the program meet the individual needs of the child. Therefore, a multi-dimensional intervention strategy that addresses the individual characteristics (both strengths and weaknesses) of the child is imperative. In the example above, Kelly received weekly social skills instruction, in addition to speech and occupational therapy. Kelly needed a full compliment of strategies to be successful socially. As her mother told me, Kelly may never be the life of the party or a "social butterfly." However, with the delivery of an effective social skills program, Kelly has been given an opportunity to develop the skills necessary to develop meaningful personal relationships. And the rest of us have been given the opportunity to meet a truly wonderful child.

References

- Bellini, S. (2006). Building Social Relationships: A Systematic Approach to Teaching Social Interaction Skills to Children and Adolescents with Autism Spectrum Disorders and other Social Difficulties. Shawnee Mission, KS: Autism Asperger Publishing.
- Bellini, S. (2006). The development of social anxiety in high functioning adolescents with autism spectrum Disorders. *Focus on Autism and Other Developmental Disabilities*, 2 (3), 138-145.
- Buggey, T., Toombs, K, Gardener, P., & Cervetti, M. (1999). *Journal of Positive Behavioral Support, 1,* 205-214.
- Dowrick, P. W. (1999). A review of self modeling and related interventions. *Applied & Preventive Psychology*, *8*, 23-39.
- Elliot, S., & Gresham, F. (1991). *Social skills intervention guide*. Circle Pines, MN: American Guidance.
- Gray, C. A. (1995). Teaching children with autism to read social situations. In A. Quill (Ed.), *Teaching Children with Autism: Strategies to Enhance Communication and Socialization* (pp. 219-242). New York, NY: Delmar.
- Gray. C. (2000). *The new social story book: Illustrated edition*. Arlington, TX: Future Horizons.
- Gresham, F. M. (2002). Best practices in social skills training. In A. Thomas. & J. Grimes (Eds.), *Best practices in school psychology (4th ed.)*. *Bethesda, MD*: NASP.
- Gresham, F. M., Sugai, G., & Horner, R. H. (2001). Interpreting Outcomes of Social Skills Training for Students with High-Incidence Disabilities. *Teaching Exceptional Children*, 67, 331-344.
- Howlin, P., Baron-Cohen, S., & Hadwin, J. (1999). *Teaching children with autism to mind-read: A practical guide*. New York, NY: Wiley Publishing.
- Hume, K., Bellini, S. & Pratt, C. (2005). The usage and perceived outcomes of early intervention and early childhood programs for young children with autism spectrum disorder. *Topics in Early Childhood Special Education*, *25 (4)*, 195-207.
- Odom, S. & McConnell, S. (Eds.) (1993). *Vanderbilt/Minnesota social interaction project play time/social time: Organizing your classroom to build interaction skills*. Tucson, AZ: Communication Skill Builders.

Odom, S. L., McConnell, S. R., & McEvoy, M. A. (1992). Social competence of young children with disabilities: Issues and strategies for intervention. Baltimore: Paul H. Brookes.

Quill, K. (2000). DO-WATCH-LISTEN-SAY: Social and communication intervention for children with autism. Baltimore, MD. Brookes Publishing.

Strain, P. S., & Odom, S. L. (1986). Peer social initiations: An effective intervention for social skill deficits of preschool handicapped children. *Exceptional Children*, *52*, 543-552.

Tantam, D. (2000). Psychological disorder in adolescents and adults with Asperger Syndrome. *Autism*, *4*, 47-62.

Welsh, M., Park, R. D., Widaman, K., & O'Neil, R. (2001). Linkages between children's social and academic competence: A longitudinal analysis *Journal of School Psychology*, 39(6), 463–481.

Article re-printed with permission from the Indiana Resource Center for Autism, at the Indiana Institute on Disability and Community, Indiana University Bloomington. Publication information: Copyright "Autism E-News" 2004, 2005, 2006, 2007. All Rights reserved. Copies may be distributed without alteration electronically free of charge. This newsletter may be reproduced without alteration, for non-commercial purposes without prior permission. "Autism E-News" does not assume responsibility for advice given. All advice should be weighed against your own abilities and circumstances and applied accordingly. It is up to the reader to determine if advice is safe and suitable for his or her own situation.

Training Announcements

June 19th-20th 2008

Title of Event: A.T. and Aug.Com 08: Pursuing New Possibilities

Speakers: Judi Sweeney, founder of the LoTTIE Kits, a series of low and mid tech tool

kits for informal assessment and evaluation.

When: Jun 19th-20th, 2008

Where: The Hotel Roanoke & Conference Center, Roanoke, VA

Cost: \$79.00

Contact: Lora Kingma, lkingma@vt.edu, http://www.cpe.vt.edu/reg/augcom

June 23rd-27th

Title of Event: Content Teaching Academy: "Educating with an Eye to the Future" Speakers: The goal of the academy is to provide high quality professional development for educators of Virginia on in-depth studies in content areas and areas of best practice. *Special Reading/SIM Academy Available this Year* This academy is limited to 35 participants. Scholarships and funding are available.

When: June 23rd-27th

Where: James Madison University, Harrisonburg, VA Cost: \$450.00 (Scholarships and funding available)

Contact: http://www.jmu.edu/contentacademy/index.shtml, Deadline to enroll June 1,

2008)

June 23rd-27th

Title of Event: The ASOL Special Education Academy

Speakers: The ASOL SE Academy is new to the Content Teaching Academy this year. This academy will focus on the content areas of Reading and Mathematics for teachers who teach students who are assessed with Virginia's Aligned Standards of Learning. This academy is limited to 100 participants. Funding is available.

When: June 23rd-27th

Where: James Madison University, Harrisonburg, VA

Contact: http://www.jmu.edu/contentacademy/ELEMSPED.shtml (Note: Apple users

need to register using the Opera Browser.)

July 14th-16th 2008

Title of Event: Shining Stars 2008: Charting the Future for Today's Chilren

Speakers: Dr. Kristi Pretti-Frontczak from Kent State University and Michele Valeri and

Ingrid Crepeau from Dino Rock Productions, Inc.

When: July 14th-16th

Where: Wyndham Virginia Beach Oceanfront, Virginia Beach, VA

Cost: \$50.00

Contact (email/website/phone): Dionne Paul-Wiggins, dpaulwig@gmu.edu, (703) 993-4496 www.sporg.com/registration?link_type=reg_info&form_id=101739 July 22nd, 2008

Title of Event: "You're Going to Love this Kid": Educating Students with Autism in Inclusive Schools. Commonwealth Autism Services and TTAC VDOE sponsor Paula Kluth Participants will learn practical ways of supporting students with autism labels and other disabilities within a general education classroom.

Speaker: Paula Kluth When: July 22nd, 2008 Time: 8:00 am - 4:00 pm

Where: Sheraton Park South Richmond, Va

Cost: 50.00

Contact (email/website/phone): Becky Boswell

www.autismva.org/documents/PaulaKluthBrochure1.pdf August 5-8th, 2008

Title of Event: Special Education Teacher Reading Academy

Speaker: This Four-Day Special Education Teacher Reading Academy is offered by Reading First in Virginia through UVA. Target Audience is Middle and High School

Special Education Teachers. When: August 5-8th, 2008

Where: Wytheville Meeting Center, Wytheville, VA

Contact: http://www.readingfirst.virginia.edu

October 2008

Title of Event: The Verbal Behavior Milestones Assessment and Placement Program -

VB- MAPP New Assessment tool by Mark L. Sundberg.

Speaker: Mark Sundberg, Ph.D., BCBA

When: October, 2008

Time: TBA

Where: Virginia Beach, Virginia

Cost: TBA

Contact: Tidewater Autism Society of America Chapter, tidewaterasa@verizon.net

Regions 1 & 8 T/TAC at VCU

Joy Engstrom engstromjn@vcu.edu

Sue Palko palkosm@vcu.edu

Linda Oggel lsoggel@vcu.edu

Regions 2 & 3 T/TAC at ODU Jennifer Mitchell <u>imitchell@ttac.odu.edu</u> Kelly Koons <u>kkoons@odu.edu</u>

Region 4 T/TAC at GMU Karen Berlin <u>kberlin@gmu.edu</u> Kris Ganley <u>kganley@gmu.edu</u>

Region 5 T/TAC at JMU Sally Chappel <u>chappesl@jmu.edu</u> Teresa Cogar <u>cogartl@jmu.edu</u>

Regions 6 & 7 T/TAC at VT Pamela Lloyd <u>plloyd@vt.edu</u> Teresa Lyons <u>lyonst@vt.edu</u>